

Van Eerd, M.M.C.J.; Wiering, M.M.A. and Dieperink, C.C. 2019.
Policy discretion, adaptation pressure and reloading implementation
experiences in EU water governance: The case of the Netherlands.
Water Alternatives 12(3): 886-906



Policy Discretion, Adaptation Pressure and Reloading Implementation Experiences in EU Water Governance: The Case of the Netherlands

Marjolein M.C.J. van Eerd

Institute for Management Research, Radboud University, Nijmegen, The Netherlands; m.vaneerd@fm.ru.nl

Mark M.A. Wiering

Institute for Management Research, Radboud University, Nijmegen, The Netherlands; m.wiering@fm.ru.nl

Carel C. Dieperink

Copernicus Institute of Sustainable Development, Utrecht University, Utrecht, The Netherlands;
c.dieperink@uu.nl

ABSTRACT: European water governance is characterised by processes of interplay and interaction. Member states present and discuss their preferences and expertise in the EU policy arena and implement EU policies at the domestic level. These processes of 'uploading' and 'downloading' are regularly studied. However, a knowledge gap exists concerning the 'reloading' of implementation experiences, i.e. the renewed uploading of information on how policies actually work domestically and how possible implementation problems are solved. Certain characteristics of EU policies are expected to affect processes of reloading. In this paper we study how adaptation pressures and the levels of policy discretion affect the reloading of implementation experiences. We empirically assess reloading processes in the EU Water Framework Directive and the EU Floods Directive. It was expected that a low level of policy discretion leads to clear reloading incentives, in order to either change the policy (if fit is low and adaptation pressure is high) or maintain stability (if fit is high and adaptation pressure is low). A high degree of policy discretion, on the other hand, leads to no incentive at all for reloading. The relatively specific Water Framework Directive indeed shows cases of reloading in which implementing agents discuss their rather technical implementation experiences in order to adjust policy or to maintain the status quo in line with their interests. However, it is notable that reloading also takes place in the relatively discretionary policy process of the Floods Directive. Reloading in this case is driven by social learning, and is triggered by the idealistic aim of improving flood risk management practices instead of changing or maintaining the policy on the basis of self-interest. The paper concludes that policy discretion and adaptation pressure do influence reloading processes, but that other factors also must be taken into account.

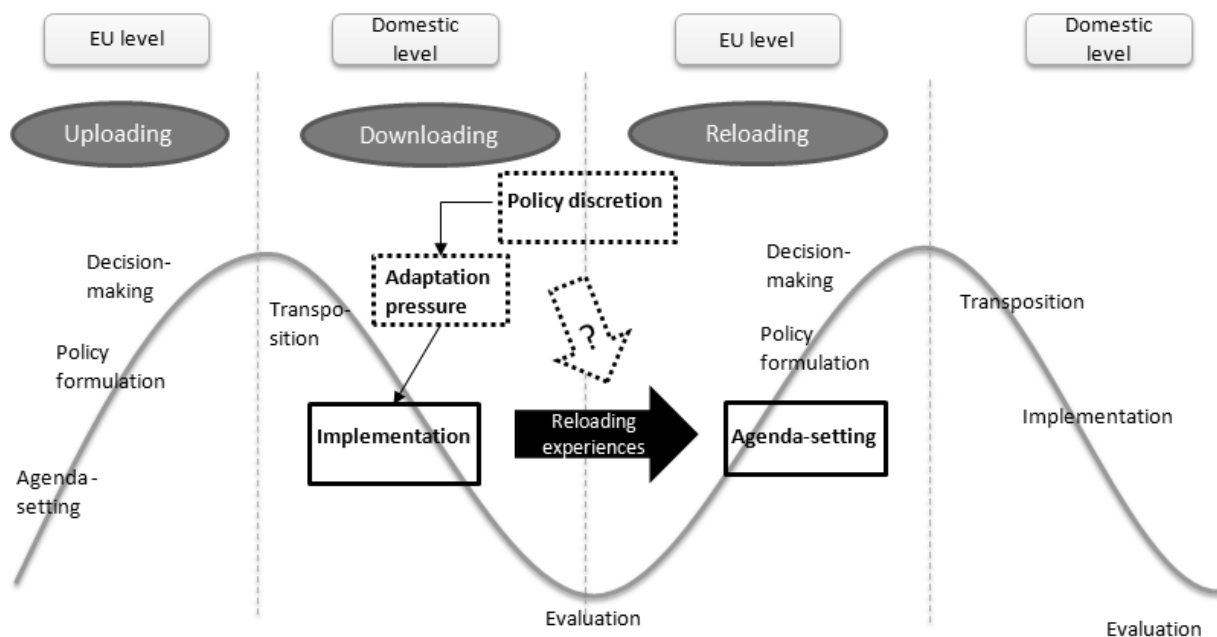
KEYWORDS: Policy implementation, policy feedback, EU Water Framework Directive, EU Floods Directive, policy characteristics, reloading, EU water governance, EU policy process, European Union

INTRODUCTION

Water governance is a multilevel, multi-actor and multi-sector domain, since water challenges cross spatial, administrative and sectoral borders (Molle, 2008; Mostert, 2006; Warner, 2006). In Europe, agents operating at municipal, regional, national and supranational levels are concerned with the governance of water issues (Moss and Newig, 2010). The EU Water Framework Directive (WFD) and the EU Floods Directive (FD) are examples of multilevel water governance policies that aim to harmonise water quality and flood risk practices across the EU. Both are formulated and decided upon at the EU

level. The European Commission has the formal mandate to initiate policy proposals which must be approved by both the Council of Ministers and the European Parliament. Member states must then implement these policies at the domestic level. Multilateral collaboration on implementation of these policies also takes place at the catchment level in river basin commissions. The different levels interact, exchanging knowledge, information and expertise.

Figure 1. Uploading, downloading and reloading in the EU policy process.



Within multilevel interactions, a distinction can be made between processes of uploading, downloading and reloading (Figure 1). Uploading and downloading are well-known concepts used in studies on the relationships between the EU and its member states (Börzel, 2002; Kaika and Page, 2003; Liefferink et al., 2011; Page and Kaika, 2003). Member states and interest groups try to shape EU policy outcomes by uploading their policy ideas and preferences to different actors involved in agenda-setting, policy formulation and decision-making, particularly to the European Commission, other member states and the European Parliament. Kaika and Page (2003), for instance, studied the uploading processes that resulted in the establishment of the Water Framework Directive (WFD). Once formulated, these EU policies are 'downloaded' to the domestic level during the stages of transposition and implementation (see Andersen and Liefferink, 1997; Börzel, 2002; Liefferink et al., 2011), during which member states and national implementing agencies must accordingly change their regulations and policies. Very often, uploading and downloading are either investigated separately or conceptualised as straightforward processes (Breeman and Zwaan, 2009). However, both legal transposition and practical implementation are political and iterative processes (Mastenbroek and Kaeding, 2006).

During processes of practical implementation, subnational agents acquire experiences about how policies work out at the street level and how implementation problems can be effectively solved. Implementation experiences are conceptualised by van Eerd et al. (2018) as "all the information and expertise acquired by implementing agents like municipalities or regional water authorities during, or as the result of the practical implementation of policies". These implementing agents are professional organisations formally charged with the practical implementation of a specific policy or policy instrument (van Eerd et al., 2018). Practical implementation experiences might trigger policy feedback and influence

the EU policy process in new rounds of agenda-setting, policy formulation and decision-making. These processes of conscious and strategic feedback are referred to as reloading (Figure 1), which means bringing implementation experiences to the table in order to influence agenda-setting with regard to new elements shaping a directive. This can generate 'new rules', but very often – and especially with framework constructs such as the WFD (Josefsson, 2015) – it can produce new guidelines, procedures or rules implementing the directive. Van Eerd et al. (2018) distinguish four crucial steps of reloading: (i) the acquisition by implementing agents of implementation experiences at the domestic level, (ii) the mobilisation by implementing agents and their representatives of such information across multiple levels of governance with the aim of setting the EU agenda, (iii) the receiving of these experiences by agents at the EU level, and (iv) the possible affecting (or active neutralising) of further EU policymaking by these experiences.

Even though the importance of EU policy feedback has been widely acknowledged in the political sciences and in public administration, reloading has rarely been addressed systematically in EU implementation studies (Breeman and Zwaan, 2009; Treib, 2014). Analysing the reloading of implementation experiences into multilevel EU architectures with framework goals is important as this contributes to the transparency, practicability and legitimacy of EU policies. Furthermore, it is presumed that policies demonstrating a robust capacity to revise and improve regulatory frameworks on the go by learning from implementation experiences create more resilient governance (see Zeitlin, 2016). It is therefore important to understand the use of implementation experiences, as they contribute to the adaptive capacities needed in multilevel water governance, particularly in light of changing climatic conditions.

In earlier studies (van Eerd et al., 2018), we have shown that the reloading of implementation experiences is influenced by both agency-based and structure-based conditions such as the ability (resources and capacity) and incentives of implementing agents to actively apply mobilisation strategies, the institutional setting that hinders or enables the reloading activities of these agents, and the openness and responsiveness of the EU policy process to such expertise (see also Dunlop and Radaelli, 2013; Kingdon, 2014; Palmer, 2015; Pierson, 1993). However, it is still unknown how certain policy characteristics may affect reloading. Although there can obviously be more variables at stake, in this contribution we specifically zoom in on policy discretion in relation to adaptation pressure, and how both affect the strategies of reloading implementation experiences (Figure 1). Policy discretion provides implementing agents with a certain control over, and 'room to manoeuvre' within, practical implementation (Dörrenbächer and Mastenbroek, 2017; Versluis et al., 2011). Reloading may also depend on the extent to which an agency must adapt to the new rules, or what the 'distance to target' is in light of the aims of the policy. In short, adaptation pressure is nearly as relevant as discretion in affecting agents' incentives to mobilise implementation experiences. For a number of reasons, it is particularly interesting to study multilevel reloading in the unique EU setting: the large distance between EU policymakers and domestic implementing agents, the many actors and players involved, the fact that the EU does not have its own implementing agents, and the European Commission's unique role as agenda-setter and policy formulator (Héritier, 1996; Pressman and Wildavsky, 1984; Treib, 2014; Young, 2010). In addition, it is relevant to mention the iterative nature of decision-making of some of the EU directives. According to Sabel and Zeitlin (2012), the WFD, together with the Common Implementation Strategy (CIS) that guides its implementation, is a prime example of experimentalist governance in action. Its aim – the concept of good ecological status (or, for that matter, good ecological potential) – is open-ended, "with methods, tools, metrics and values for its assessment to be developed through the implementation process" (ibid: 5), while the CIS secures ongoing reviews and updates with the help of technical guidance documents (Sabel and Zeitlin, 2012; Zeitlin, 2016). Reloading can take place in more iterative, experimentalist settings, but is in no way bound to that context. Implementation feedback is relevant in any multilevel policy context, and processes of reporting and evaluation provide opportunities to give feedback from the ground up in almost all EU policies. In this analysis, we highlight not so much

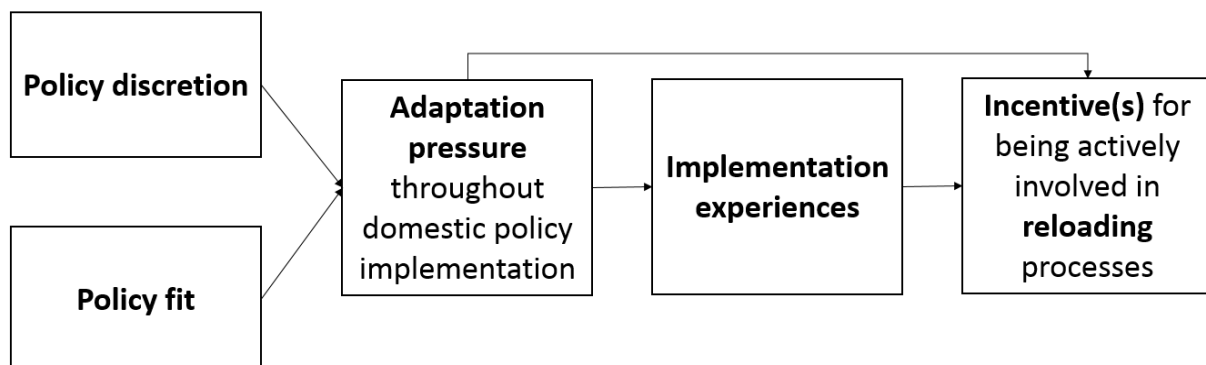
the ongoing iterative, but more the strategic, reloading of implementation experiences. In any case, EU institutions are eager to learn from practical implementation experiences, particularly in light of the EU's implementation deficit and legitimacy issues (European Commission, 2015, 2016; Interviews 14, 41, 54).

The aim of this paper is to better understand the relationship between policy discretion, adaptation pressure and reloading (Figure 1). Hence, our central question is: in what way do policy discretion and adaptation pressure affect the reloading of implementation experiences in EU water governance? We focus on gaining a better understanding of the *process* of reloading, instead of aiming to grasp its outcomes. This paper is structured as follows: in the second section, we further elaborate on the link between policy discretion, adaptation pressure and incentives for reloading and, based on these insights, working hypotheses are formulated. We then describe the research methods chosen. The level of policy discretion of the WFD and FD are then compared, from which specific hypotheses are drawn. Subsequent to that, reloading of implementation experiences in both directives is addressed. Finally, we discuss the relevance of the hypotheses and present some concluding remarks.

CONCEPTUALISING THE LINK BETWEEN POLICY DISCRETION, ADAPTATION PRESSURE AND RELOADING

In this section we build on insights of traditional Europeanisation and policy process literature in order to better understand how variation in policy discretion eventually affects the strategic use of implementation experiences in the EU policy process. Figure 2 specifies the relationship between discretion, adaptation pressure and the reloading of implementation experiences. Insights derived in this section are used to generate three working hypotheses, which are addressed in the remainder of this paper.

Figure 2. Linking policy discretion, adaptation pressure and reloading.



Policy discretion and adaptation pressure

Policy discretion can be defined as the room left to lower levels of government in a policy's interpretation and implementation. In line with the subsidiarity principle, EU legislation regularly leaves certain issues to the discretion of member states in order to allow for specific national, regional or local circumstances (Franchino, 2007; Steunenberg and Toshkov, 2009). Variation in discretion, and in the conditions under which an EU policy delegates discretion to member states, has frequently been studied (e.g. Franchino, 2007; Pollack, 1997; Thomson and Torenvlied, 2011). One can distinguish between different levels of discretion (Steunenberg and Toshkov, 2009). The level of discretion granted to member states has a significant effect on a policy's transposition and implementation, since it influences domestic agents' control over practical implementation and compliance (Dimitrova and Steunenberg, 2013). Directives having a higher level of policy discretion are easier to transpose and implement, since they give member

states more implementation freedom. In such cases, implementing agents experience ample opportunities to adapt EU policies to domestic conditions (Steunenberg and Toshkov, 2009; Thomson, 2007, 2009; Treib, 2014; Zhelyazkova and Torenlid, 2009; Zhelyazkova, 2013). In this study we follow the commonly recognised idea that more policy discretion normally leads to less adaptation pressure, which makes the transposition and implementation of a policy easier.

Adaptation pressure not only depends on the level of policy discretion, but also on the level of policy fit (Figure 2). Scholars focusing on the 'goodness of fit' hypothesis argue that smooth adaptation to, and successful compliance with, EU policies is assumed to depend on the degree to which such EU policies fit with existing national policies and institutions (Börzel and Risse, 2000; Duina, 1997; Héritier et al., 2001; Knill and Lenschow, 1998, 2000; Mastenbroek, 2005; Mastenbroek and Kaeding, 2006). Both discretion and fit affect the adaptation pressure which an implementing agent encounters during the stage of domestic policy implementation. Inherently, these policy characteristics affect the experiences of an implementing agent.

Incentives for reloading

Following both uploading and agenda-setting literature (e.g. Börzel, 2005; Héritier, 1996; Kingdon, 2014), one can distinguish a range of agents' incentives for the uploading of preferences, knowledge and information to the EU policy process. Examples of these incentives are: minimising (new) implementation and adaptation costs; overcoming (future) implementation problems; first-mover advantages; establishing a European playing field for one's industry; and, based on national legislation, promoting the adoption of more stringent EU policies (Héritier, 1996; Liefferink and Andersen, 1998). We expect similar incentives to play a role in the reloading of implementation experiences. In particular, an agent's interest in maintaining stability in the policy process or in reaching a certain level of policy change (i.e. instrument calibrations; changes to the set of policy instruments or instrument logic; changes to a policy's setting or to its objectives or goals) is expected to affect incentives for reloading practical implementation experiences. It is presumed that both adaptation pressure and discretion affect such incentives.

The conceptualisation leads to the following working hypotheses (based on Figure 2):

H1a: A low level of policy discretion and a low level of fit leads to a high adaptation pressure; this is expected to give a clear incentive to reload implementation experiences, *aiming at changes* in policy (in order to improve fit or expand discretion).

H1b: A low level of policy discretion and a good fit leads to low adaptation pressure; this is expected to give a clear incentive to reload implementation experiences in order to keep the situation as it is, in other words, *aiming at stabilising* the policy (keeping the good fit as it is).

H2: A high level of policy discretion is expected to lead to a low level of adaptation pressure, with either good or bad fit, and will give *no incentive* to reload at all. There is no necessity to reload with the aim of change or stability.

The difference between low adaptation pressure with incentives to stabilise policies (H1b) and low adaptation while giving no incentive to reload experiences (H2) is that in a 'low discretion – good fit' (H1b) situation, agencies want to keep it that way: there is a risk that any change could lead to a less-good fit. In a situation with high discretion (H2), future change of a directive or its implementation rules – because of other reloading processes or the operations of other agents of change – would be less of a risk. So, in this case we don't expect that actors will have a great incentive to reload.

RESEARCH METHODS

In order to test our hypotheses, we have studied the reloading of implementation experiences for the WFD and FD. Selection of these directives can be explained, as both are cornerstones of current EU water governance, and the issues of water quality and quantity have been central topics on the EU water

agenda over recent decades (Kallis and Butler, 2001; Green et al., 2013). As the two directives are comparable for most policy characteristics yet vary with regard to the degree of policy discretion (see section 4), it makes it particularly interesting to compare the reloading processes of these specific directives. Since it is not feasible to study reloading in detail in all EU member states, we have chosen to analyse the reloading of implementation experiences in the Netherlands. This country has been selected as it has a long tradition of water management and can be seen as an active agent in addressing EU water governance issues (Bourblanc et al., 2013) and so the occurrence of various reloading activities can be expected.

In the next section, we compare the level of policy discretion that both directives allow member states in the achievement of their overall goals. For assessing the level of policy discretion, we follow the approach applied by Steunenberg and Toshkov (2009). They first determine the number of a policy's substantive (sub-)articles that are relevant to member states and, secondly, they check whether each of these (sub-)articles contain a closed or more open statement. A closed statement prescribes precisely what a member state must do or cannot do, whereas open statements allow for such choices to be made by implementing agencies. Each article is classified as closed or open, based on the interpretation of the researcher. Next, the following index (Figure 3) can be made (Steunenberg and Toshkov, 2009): $D_i = O_i / (O_i + C_i)$

D_i is the policy's discretion to (sub)national implementing agents, C_i is the number of closed articles, and O_i is the number of open articles. Based on this index, discretion has a value of between zero and one. The higher the outcome value, the more discretion a policy allows (Figure 3). The Directive 2003/33/EC on Advertising and Sponsorship of Tobacco Products, for instance, is regarded as a very restrictive one (0.09), while the Directive 2002/44/EC on Exposure of Workers to Vibration (0.52) is seen as less restrictive (Steunenberg and Toshkov, 2009: 13).

Following Steunenberg and Toshkov, we did not include in our calculations the commonly used final provisions of the WFD and the FD, which address issues like the policy addressees, transposition and entry into force. Inclusion of these rather closed statements, especially for directives having a small number of articles, would disproportionally reduce the discretion score (Steunenberg and Toshkov, 2009; 958). For the WFD, we only focus on the articles dealing with ecology in its main legal text. We do not focus on the older related directives, nor on its daughter directives. Since only presenting a number as the result of a quantitative interpretation of legislative texts is not enough to fully understand the degree of discretion which an implementing agent experiences at street level, we also qualitatively describe the contents of articles, i.e. specification of goals, tools, measures, reporting and monitoring requirements. Subsequently, we have double checked if the variation in discretion level, as calculated by using the approach of Steunenberg and Toshkov, is also perceived by relevant actors.

In order to get an understanding of the actual implementation experiences and reloading processes, we build on multiple data sets. First, scientific literature has been studied. Second, policy documents were thoroughly assessed, ranging from the directives themselves and related Common Implementation Strategy guidelines, to minutes of meetings and presentations at the EU and at national levels. Third, we base our analysis on 54 semi-structured interviews with staff members of the European Commission, (Dutch) domestic implementing agents, and stakeholder and member state representatives involved in the policy process of EU water governance.¹ Interviews were held between October 2013 and July 2017, lasted from 45 minutes to over two hours, and were audio recorded and fully transcribed. Content analysis of the documents and interview transcripts was done by applying deductive coding, using our theoretical concepts: uploading, downloading, reloading, policy discretion, adaptation pressure and policy fit. In addition, the first author joined several EU working and expert group meetings, as well as discussion sessions concerning the implementation of the WFD and the FD in the Netherlands.

¹ A more detailed overview of the interviewees can be found in Appendix I.

POLICY DISCRETION IN THE WFD AND THE FD

Key characteristics of the WFD and the FD

Before clarifying what level of policy discretion both directives offer, we first give their key characteristics (see Table 1). The WFD, adopted in 2000, is the overarching piece of legislation that aims to improve water quality in all of Europe's aquatic environments. It introduces a new, integrated, ecosystem-based approach, and coordinates policies that were previously addressed separately. Important innovations are the introduction of the basin approach (the management of a river basin along hydrological boundaries), the introduction of water pricing, the obligations for public participation, and the focus on the setting of ecological objectives. Of central environmental concern are both surface water and groundwater bodies, which should have achieved a good ecological and chemical status by 2015. A key element of the WFD is the development of river basin management plans (RBMPs), which consist of a detailed account of how (ecological) objectives are to be reached within the timescale required. Each RBMP should be accompanied by a programme of measures, including a number of mandatory 'basic' measures.² As member states are responsible for the directive's transposition, application and enforcement, they are to a certain extent empowered to dictate the specifics of how to achieve the WFD's goals. The European Commission checks its compliance, yet there are several legislative loopholes that member states can exploit if they meet certain conditions, for instance they can extend the 2015 good ecological status deadline to 2021 or 2027 by using the argument that the 2015 deadline would result in disproportionate costs (Dieperink et al., 2012; Evers, 2012; Green et al., 2013; Griffiths, 2002; Interviews 32, 42, 52; Kaika and Page, 2003; Kallis and Butler, 2001; Page and Kaika, 2003; Wiering et al., 2009).

Even though the WFD is often referred to as an integrated water policy, it addresses water quantity issues only to a limited extent. Attention to flood risk management (FRM) was raised following several (near) floods in various EU countries. In 2003, the downstream-located Netherlands and France jointly placed the importance of floods on the political agenda in Europe (Dworak and Görlach, 2005). The FD, adopted in 2007, aims to establish a framework for the assessment and management of flood risks in order to reduce the adverse consequences of floods. Member states should first carry out a preliminary assessment to classify areas at risk of flooding (Article 4). For such zones, member states need to produce flood risk and hazard maps (Article 6), as well as integrated FRM plans (FRMPs) (Article 7) (Directive 2007/60/EC; Evers and Nyberg, 2013; van Eerd et al., 2015). However, specific requirements on how to fulfil the assessment, maps and plans have not been formally set out.

Both the WFD and the FD can be classified as experimentalist governance (Sabel and Zeitlin, 2012), as they are examples of "framework rulemaking and revision through recursive review of implementation experience in different local contexts" (ibid: 3). In order to structure such review processes, a Common Implementation Strategy has been set up, involving two meetings of water directors per year that are co-chaired by the presidency (a member state representative conforming with the nationality of the presidency of the Council of Ministers) and the European Commission (Interviews 2, 5, 7, 10, 11, 12, 15, 24, 27, 31, 49, 50, 54; Josefsson, 2015: 240). These meetings are prepared at a lower level, in specific working and ad hoc groups.

Obviously, the object of regulation of the two directives differs as the WFD focuses on water quality issues and the FD addresses FRM. By definition, political and societal attention varies for these respective objects. FRM, for instance, is affected by agents' risk and safety perceptions, and the issue of flooding is often more sensitive and visible in comparison with ecological issues. Similarly, policy intention differs between the two directives as well. Despite these differences one can also identify several similarities, such as the comparable policy instruments which are required, i.e. management plans. Furthermore,

² These are clearly described in the WFD and consist of, for instance, the implementation of all other relevant EU legislation for the protection of water, and the implementation of pollution control and protective measures (Kallis and Butler, 2001; Wiering et al., 2009).

similar cyclical six-year planning processes can be recognised, and both stimulate public participation and stakeholder involvement. Their geographical focus is also similar, i.e. the river basin as a unit; both policies also address a wide range of actors in multiple sectors, i.e. spatial planning, water management, industry and agriculture. Moreover, an overlap of legal and planning instruments can be found when studying the member states' daily implementation (Evers, 2012; Priest et al., 2016; Interviews 1, 12, 17, 19, 23, 43). In the Netherlands, the same authorities are concerned with the implementation of both directives (Interviews 16, 20, 24, 43, 53) (Table 1).

Table 1. Key characteristics of the WFD and the FD.

Key characteristics		WFD (2000/60/EC)	FD (2007/60/EC)
Object of regulation	<i>Water issue addressed</i>	Water quality management	Flood risk management
	<i>Policy objective</i>	Reaching a good ecological and chemical status on all surface water bodies and a good quantitative and chemical status for groundwater bodies	Assessment and management of flood risks to reduce adverse consequences
	<i>Geographical area</i>	River basin districts	River basin districts
Policy nature	<i>Specification of goals</i>	Specific ecological quality standard must be met; list of parameters; some methods, ecological goals and standards are defined	No specific quantitative goal; qualitative goal: level of risk should be reduced; up to the member states/local and regional levels to define regulation/norms for risk
	<i>Time scale</i>	Clear milestones: 2000-2015, 2021-2027	Clear milestones: 2007- 2015, 2021-2027
	<i>Reporting</i>	Required	Required
	<i>Monitoring</i>	Monitoring of the water status is required	No monitoring required
	<i>Enforcement</i>	The Commission may start an infringement procedure at the European Court of Justice. The latter has the power to impose financial penalties (Article 258, TFEU). In addition, the WFD also specifies in Article 23 that member states should develop sanctions which are applicable on the national level, to make sure the WFD is properly implemented	The Commission may start an infringement procedure at the European Court of Justice; the latter has the power to impose financial penalties (Article 258, TFEU)
	<i>Exemptions</i>	Several possible exemptions from the obligation to attain good status for all water bodies in 2015 (i.e. Article 4.4, 4.5, 4.6, 4.7)	None
Policy discretion score		0.235	0.5

Policy discretion of the WFD and FD

The WFD offers less policy freedom than does the FD. For the WFD we calculated a score of 0.235,³ and for the FD a score of 0.5.⁴ This difference was also perceived by our interviewees (Interviews 3, 4, 6, 7, 12, 15, 23, 24, 25, 26, 28, 30, 34, 39, 47). However, this calculation does not demonstrate the specific, deviating elements of discretion in both directives. Since implementing agents are directly concerned with these elements when implementing the policy on the ground, it is relevant to clarify them. Even though both the WFD and the FD are framework directives, the strength and specification of obligations varies considerably. The WFD uses more substantive requirements than do the FD's procedural obligations (Keessen and van Rijswijk, 2012; Priest et al., 2016). Although the WFD has often been referred to as a flexible framework – or 'new generation' directive – which leaves considerable room for implementation (Jordan et al., 2003; Knill and Lenschow, 2000; Knill and Liefferink, 2007; Liefferink et al., 2011), several parts of this directive do not tolerate much discretion. The WFD requires member states to set specific targets and end goals for water bodies, which further decreases the implementation freedom of implementing agents. An example is the obligatory ecological goal-setting process at the domestic level (Liefferink et al., 2011). The WFD also has an explicit obligation to ensure that water bodies should not experience a 'deterioration in status'. There is no commensurate specification in the FD, where no specific quantitative goals are formalised and the central objective only concerns the qualitative and rather abstract stipulation that flood risk levels should decrease. This objective is not further specified, as types of floods differ markedly across Europe and the risk and consequences of such flood events depend on local and regional circumstances (Evers and Nyberg, 2013; Newig et al., 2014; Wiering et al., 2009; Interviews 10, 11, 13, 18, 30). The FD's procedural obligations leave room for member states to take national circumstances and policies into account, to decide upon their own FRM objectives and the prioritisation of specific measures (Directive 2007/60/EC: Article 7.2; Mostert and Junier, 2009; Priest et al., 2016). In addition, while both directives require reporting on progress and the obligation to monitor, enforcement is only explicitly mentioned in the WFD (Evers and Nyberg, 2013; Wiering et al., 2009). Once member states have committed themselves in their RBMPs to a specific set of objectives and measures, the EU will enforce its achievement within the time frames indicated (Wiering et al., 2009). Yet, the WFD also includes exemptions, for example for extending deadlines, such as Article 4.4, 4.5, 4.6 and 4.7 (Directive 2000/60/EC). In comparison, the FD is so open and flexible that it does not include such exemptions (Herman, 2010; Howarth, 2007). Setting common EU standards for flood protection was considered politically and technically infeasible, due to the lower legal competences of the EU in the field of FRM and spatial planning, as compared to managing ecological water challenges and the varying nature of flood risk across Europe (Priest et al., 2016; Interviews 11, 30, 41, 51).

Based on our comparison, we expect Hypotheses 1a and 1b to be confirmed in the WFD's reloading cases, and we expect the cases of reloading of the FD to be in line with Hypothesis 2. On the one hand, as suggested in H1a, the WFD's lower level of policy discretion in combination with high adaptation pressure will contribute to a strong reloading incentive for changing the ongoing policy process in line with domestic interests. On the other hand, as in Hypothesis 1b, when the WFD easily fits the domestic

³ We have coded the following WFD articles as open: 1, 4, 12, 23. Article 4 may be very closed concerning the good chemical status, but with regard to ecological status (which is the focus of this article) member states have quite some discretion. It is therefore coded as open. The following WFD articles were coded as closed: 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 24. Article 14, for example, requires that member states involve the public and gives specifications on how to do so. The following articles are not included in the calculations: 16, 17, 18, 19, 20, 21, 22, 25, 26, and the annex. These articles are not (directly) addressing the member states. Therefore, the calculation is as follows: 4 (open articles)/4 (open articles) + 13 (closed articles) = 0.235.

⁴ We have coded the following FD articles as open: 1, 2, 5, 7, 8, 9, 13. Article 5, for example, states that member states shall identify areas for which they conclude that potential significant flood risks exist. This article is coded as open, since specific requirements on the required identification process and the meaning of significant flood risk are open for interpretation by the member state itself. Articles 3, 4, 6, 10, 14, 15 and 17 are coded as closed. For example, Article 14 clearly outlines what a member state should do at what point in time. Articles 11, 12, 16, 18, 19 and the annex were excluded from the calculation. Therefore, the calculation is as follows: 7 (open articles)/7 (open articles) + 7 (closed articles) = 0.5.

context, and adaptation pressure is relatively low and is combined with a low level of policy discretion, one can expect implementing agents to actively reload their experiences in order to 'keep it as it is'. This will lead to maintaining the status quo and the stabilisation of policies. In contrast, as Hypothesis 2 states, the FD's higher level of discretion is expected to lead to no necessity for reloading.

IMPLEMENTATION EXPERIENCES AND RELOADING OF THE WFD IN THE NETHERLANDS

As the WFD requires member states to set up comprehensive institutions and procedures for the control of the chemical and ecological quality of water bodies in Europe, its implementation turned out to be a lengthy and difficult process. Several implementation struggles can be identified, such as the determination of water bodies and interpretation difficulties concerning principles and concepts (Bourblanc et al., 2013; Interviews 8, 16, 21, 22, 42, 43; van der Arend et al., 2011). Help and guidance was provided at the EU level to deal with implementation difficulties in a process of joint implementation and intercalibration. This has taken place, in particular, through the CIS (Interviews 12, 14, 35, 36, 41, 45, 46, 50, 52; Santbergen, 2013; Wiering et al., 2009).

The WFD's goals and principles were first transposed in the Netherlands in the WFD Implementation Act in 2003. In 2009, a new and fully integrated Water Management Act (*Water Wet*) came into force. The WFD is implemented in the Netherlands in a decentralised water governance system. While the Ministry of Infrastructure and Water Management is in the end responsible, the regional water authorities and the Ministry's Public Works Department (*Rijkswaterstaat*) have to take the lead in setting the targets and implementing appropriate measures (Uitenboogaart et al., 2009; Interviews 8, 9, 24). For the WFD's implementation the Dutch chose a pragmatic approach, after a major parliamentary battle was triggered by an alarmist consultancy report commissioned by the Ministry of Agriculture, and a heavy lobbying campaign by farm and business organisations. According to this report, WFD measures would limit economic and agricultural activities (Behagel, 2012; Van der Arend et al., 2011). The modestly ambitious approach of the Netherlands (and other member states) was also the result of a lack of knowledge about the behaviour of the natural water system, financial limitations and high implementation costs, mutual dependencies between responsible implementing agencies, poor fits with other EU directives like the Habitats and the Birds Directives (79/409/EEC and 92/43/EEC), and public participation problems. In the Netherlands in particular, fear of potential legal complications of setting high ecological standards also restricted an ambitious implementation (Dieperink et al., 2012). The Dutch used the WFD's exemptions to extend the deadline for reaching the objectives from 2015 to 2027 (Directive 2000/60/EC; Ligtoet et al., 2008; Uitenboogaart et al., 2009).

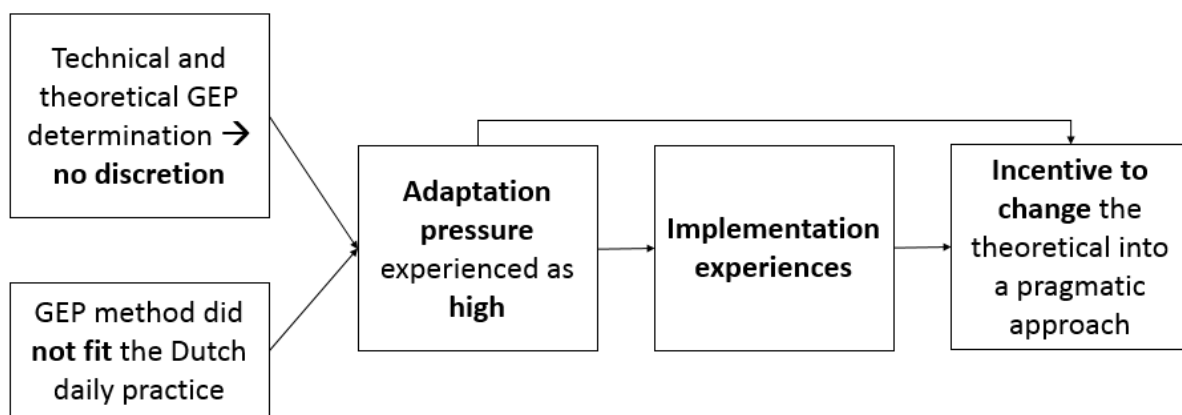
We expect that the relatively low level of policy discretion the WFD offers implementing actors will stimulate Dutch incentives to reload. Furthermore, we expect the adaptation pressure that was experienced to be influential in steering the incentive to reload in the direction of change or stability, i.e. Hypotheses 1a and 1b. These hypotheses are tested in two specific cases of reloading implementation experiences. The first concerns the determination of the ecological potential of waterbodies and the second concerns the reporting requirements member states must meet.

Good ecological potential

Following the WFD's requirements, the Dutch identified a large proportion of their water bodies as heavily modified (42%) or artificial (53%) (European Commission, 2007; Liefferink et al., 2011; Uitenboogaart et al., 2009). Identifying a water body as artificial or heavily modified means that, for these bodies, a 'good ecological potential' (GEP) instead of a 'good ecological status' should be reached, which allows for relatively more policy discretion in setting ecological goals. However, the rather theoretical and technical measurement approach for determining a water body's GEP was considered to be too strict and caused implementation difficulties in practice (Interviews 16, 17, 22, 42, 52, 53). Dutch regional water managers experienced difficulties because of the GEP's ambiguous definition, because the GEP is defined

as a deviation from a theoretical reference situation, and because implementing agents lacked the required knowledge about pristine and reference conditions of water bodies as well as their restoration potential. Furthermore, the prescribed GEP approach did not fit the daily governance approach of Dutch actors. Combined, these factors resulted in a relatively high adaptation pressure being experienced by Dutch regional water authorities (Borja and Elliot, 2007; Carr and Crosnier, 2005; Interviews 5, 8, 9, 16, 19) (Figure 4). The implementation experiences were exchanged and combined by regional agents and national key actors at several collaboration platforms. The national actors strategically shared this issue at the CIS water director level, in the hope of changing the GEP determination method into a method which took an inventory of feasible measures as a starting point. Eventually, the more pragmatic approach suggested by these Dutch agents became formalised in a CIS guidance document (CIS, 2009; Hering et al., 2010; Interviews 14, 15, 42, 54).

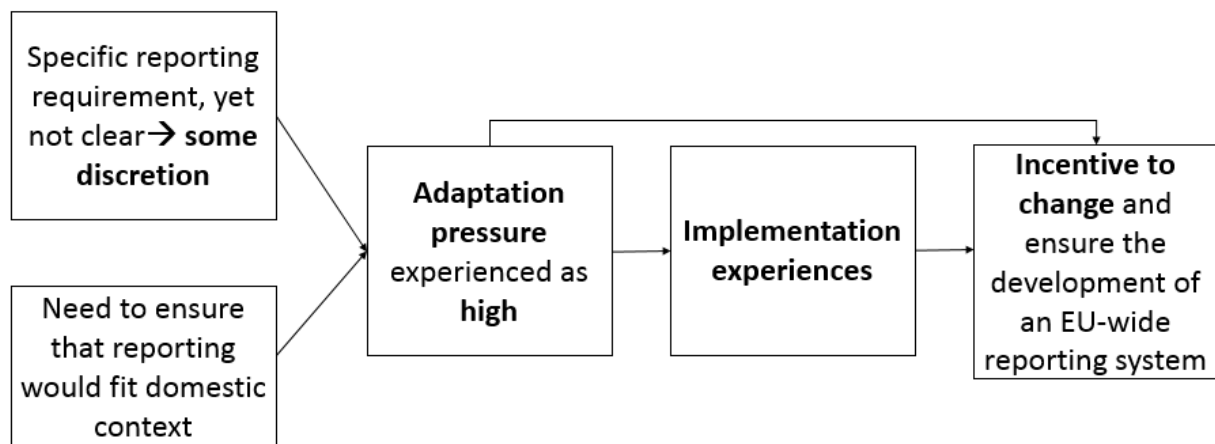
Figure 4. Policy discretion, adaptation pressure, and reloading in the GEP case.



Reporting requirements

An important element of the WFD is its requirement to report (Article 15), that is, the requirement to send the RBMPs to the Commission and report progress concerning the implementation of planned measures. Adaptation pressure experienced by Dutch implementing agents in this case was relatively high, as clear deadlines for reporting were set and EU enforcement is based on reporting outcomes. However, details on what exactly to report and how to organise this reporting were lacking, which caused implementation difficulties in the Netherlands and in other member states (Interviews 16, 22, 24, 30, 41, 44, 48, 52, 53). Experiences concerning this lack of clarity were shared by Dutch representatives in the EU CIS Data and Information Sharing (DIS) working group, with the incentive to change and clarify existing reporting practices. (Figure 5). The Dutch found support for their reporting practices among several other member states. Based on reporting difficulties expressed in the DIS working group, the Commission decided to develop a common reporting system, which was called the Water Information System for Europe (WISE). This system would harmonise and ease national reporting and, in addition, would enable EU-wide assessment as data provided would become more comparable. During the development of this system, Dutch representatives reloaded technical expertise to ensure that the newly developed system would fit existing domestic practices, which would lead to less work, fewer implementation costs and no need to develop new practices (Interviews 14, 16, 17, 22, 24, 43; CIS, 2009).

Figure 5. Policy discretion, adaptation pressure, and reloading in the reporting case.



IMPLEMENTATION EXPERIENCES AND RELOADING OF THE FD IN THE NETHERLANDS

In 2009, the FD was also transposed in the Water Management Act (Priest et al., 2016). Similar to the set-up established for implementing the WFD, the functionally decentralised water governance system of the Netherlands assigns practical implementation responsibilities concerning the FD to a wide range of actors (van Eerd et al., 2015). In the Netherlands, adaptation pressure and the effect of the FD on national FRM policy has been minimal, which can be explained simply by the goodness of fit between the FD and existing institutionalised domestic FRM policy and practice. A synergy was perceived between the FDs and Dutch framings and perceptions on FRM (i.e. the solidarity principle and the principle of good neighbourliness, and river basin management) (van Eerd et al., 2017; Priest et al., 2016; Interviews 1, 3, 10, 11, 12, 13, 20).

The Dutch shared their implementation experiences with other member states in the working group on floods, which is one of the working groups of the WFD CIS structure. In comparison with the WFD's CIS groups, this working group consists of a small, committed, stable, clearly delineated and involved group of actors, being primarily experts and governmental representatives. This expert-oriented setting creates a learning atmosphere (Interviews 11, 12, 20, 30, 31, 38, 51, 53) in which discussions are less formal and concern primarily technical issues: "Acts of lobby[ing] are less usual in the Floods group as the discussions are primarily of a technical nature" (Interview 31). Moreover, "the diversity of FRM approaches fitting the FD's scope enables the learning possibilities in the working group" (Interview 53).

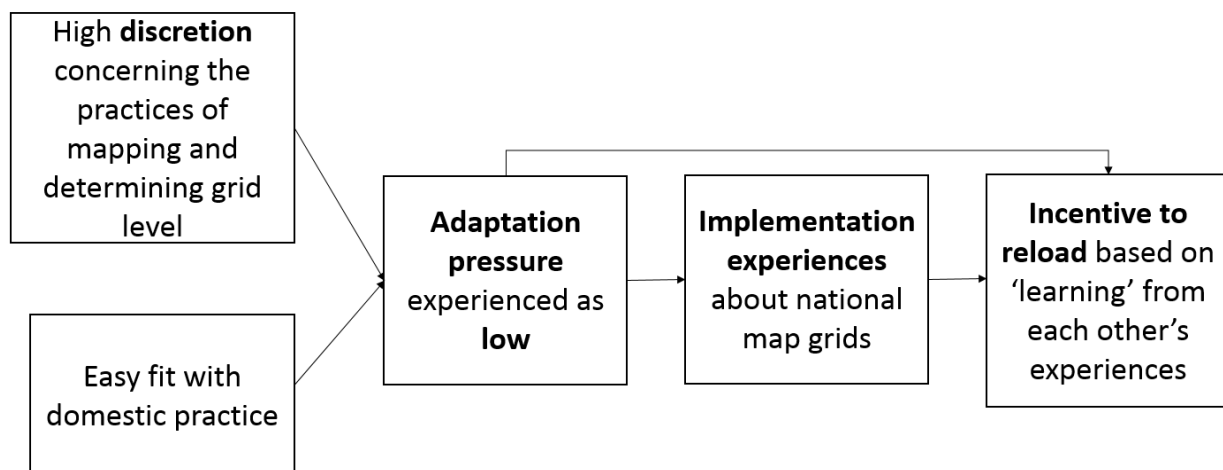
We expect that, due to its high level of policy discretion and resulting low adaptation pressure, there is no incentive for reloading (as suggested in Hypothesis 2). To test this hypothesis, we elaborate on the map grids and scales case, and on the case of the definition of significant flood risks

Map grids and scales

One important requirement of the FD is the development of flood risk and hazard maps for areas identified as vulnerable to floods. Adaptation pressure for such mapping is relatively low, since not many specific obligations are set. One result is that the scales of maps used in the EU vary significantly, e.g. for Brandenburg (Germany) the scale is 1: 2500, in the Netherlands it is 1: 50,000 and for the Serchio River in Italy it is 1: 75,000 (Suykens, 2015; Nones, 2015; van Rijswijk et al., 2010). The development of more detailed requirements and guidance for mapping was discussed in the CIS working group on floods. In reaction to a Commission proposal of a 5-by-5-metre grid level for FRM mapping, Dutch representatives responded by showing that a 100-by-100-metre grid would better fit mapping practices at the member

state level. Based on the daily experiences shared by Dutch regional implementing agents at several regional and national platforms (for example, at regular IMPRO (*Implementatie Richtlijn Overstromingsrisico's*) meetings),⁵ the Dutch representatives at the EU level were able to argue that a too-small grid level would not be appropriate (Interviews 1, 10, 11, 12, 13, 20, 31). As the discussion was open, and a good fit already existed, there was no need to change or stabilise the policy process (Figure 6). Dutch experiences with map grids were used for learning purposes, and member states from particularly Eastern Europe were eager to learn from long-term Dutch experience in mapping flood risks (Interviews 3, 13, 38, 51, 53, 54).

Figure 6. Policy discretion, adaptation pressure, and reloading in the case of FRM mapping.

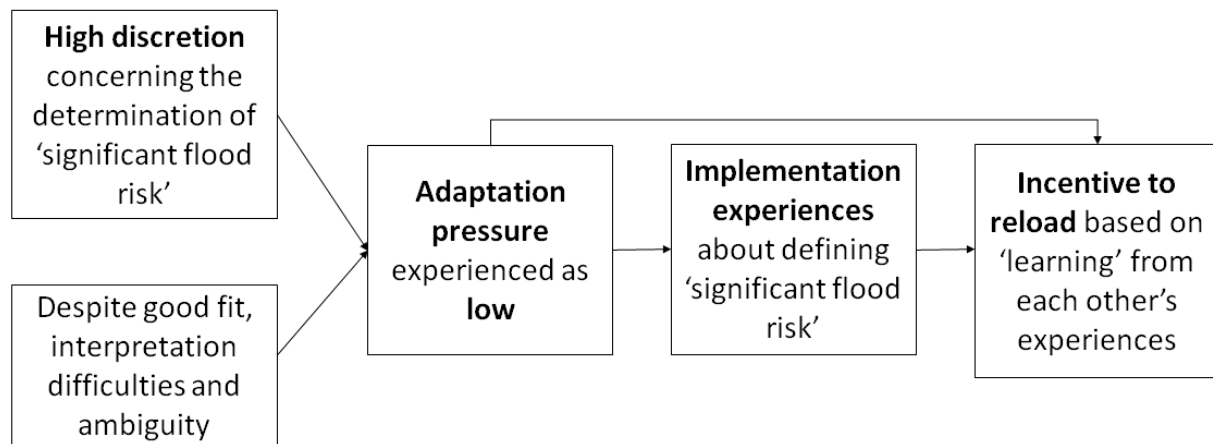


Defining a 'significant flood risk'

The lack of EU-wide consensus about important FD definitions and concepts – in particular the room left to member states for delineating a 'significant flood risk' – led to interpretation difficulties and heated discussions among implementing agents in the Netherlands (Mostert and Junier, 2009; Van Eerd et al., 2015). Experiences, definitions and approaches of member states to this determination were exchanged in the CIS working group on floods (Interviews 1, 4, 7, 11, 12, 20, 23, 30). The Dutch presented their definition of a significant flood risk as "[a flood] that cause[s] fatalities and/or that cause[s] major societal disruptions" (STOWA, 2016). In comparison to the definition of flood risk in Article 2 of the FD ("the combination of the probability of a flood event and of the potential adverse consequences for human health, the environment, cultural heritage and economic activity associated with a flood event"), the Dutch definition is rather minimalistic. No common definition or guidance document was agreed upon as the subsidiarity principle was considered more important, however learning took place between member states. Several representatives, particularly those from Eastern European member states, mentioned that the experiences of the Dutch facilitated their understanding of the FD (Interviews 51, 53, 54).

⁵ IMPRO meetings are an important venue for discussions about FRM between actors from the Dutch Ministry of Infrastructure and Environment, Rijkswaterstaat, the provinces, safety regions and the union of regional water authorities.

Figure 7. Policy discretion, adaptation pressure and reloading in the case of defining a 'significant flood risk'.



DISCUSSION

Both the WFD and FD cases showed that reloading starts as a bottom-up process, and practical implementation experiences are mobilised strategically across multiple levels of governance. Domestic experiences are shared in workshops via letters and notes, bilateral conversations, presentations and conferences. The WFD's CIS network stimulated the continual exchange of implementation experiences by providing the required reloading venues in both the FD's and WFD's policy process. However, the characteristics of the floods working group were slightly different from the WFD-related groups: they were less politicised, were engaged in more technical discussions, and were a smaller group with a clear learning atmosphere. We also saw that, for both directives, the European Commission is keen on learning from domestic experiences to improve its implementation across the EU. In some cases, the Commission even organises specific consultations or bilateral meetings with member states' representatives for the exchange of implementation experiences (Interviews 1, 2, 6, 7, 8, 11, 12, 15, 29, 41, 45, 49, 54).

We assumed that the characteristics of the directives themselves in terms of policy discretion and adaptation pressure would affect incentives for reloading of implementation experiences. In Table 2 we have specified our three hypotheses, and Table 3 shows our case study findings.

Following our hypotheses, we expected reloading to take place in the WFD cases due to the lower level of policy discretion. We assumed that this lower level of implementation freedom would trigger mobilising agents to strategically reload their expertise in order to maintain the status quo or to achieve change in line with their domestic interests. The incentive to maintain the status quo or to change would depend on the adaptation pressure experienced by an agent (Hypotheses 1a and 1b). WFD cases indeed confirmed that Dutch representatives mobilised domestic implementation experiences up to the EU level in order to ensure that the ongoing policy process and the WFD's further implementation would fit their domestic preferences and concerns. Discussions during reloading processes have both a technical and politicised nature. They were initiated when a certain level of friction was experienced between EU policy and the daily implementation practice of water management, which is more common in cases of little implementation freedom. These cases illustrate that incentives for WFD reloading show an overlap with incentives mentioned in initial uploading and agenda-setting literature, i.e. minimising implementation and adaptation costs, overcoming (future) implementation problems, and first-mover advantages (Héritier, 1996; Liefferink and Andersen, 1998). The rationale identified was often an agent's self-interest.

Table 2. Policy discretion, adaptation pressure, and reloading: three hypotheses.

	Policy discretion	Level of fit	Adaptation pressure	Expected reloading
H1a	low	low	high	aiming at change
H1b	low	high	low	aiming at stabilisation
H2	high	low or high	low	no reloading

Table 3. Policy discretion, adaptation pressure, and reloading: a confrontation of case study results and hypotheses.

	Policy discretion	Level of fit	Adaptation pressure	Observed reloading	Expected reloading	Hypothesis confirmed/rejected
WFD: GEP case	low	low	high	aiming at change	aiming at change	confirms H1a
WFD: Reporting case	medium	unclear	high	aiming at change		
FD: Map grids and scales	high	high	low	aiming at learning	no reloading	rejects H2
FD: Defining significant flood risks	high	high	low	aiming at learning	no reloading	rejects H2

We presumed, however, that for the FD cases one would not find much reloading, as no necessity exists for mobilising agents due to the openness and flexibility of this directive (Hypothesis 2). Even though the FD's implementation freedom and the good fit to domestic practices contributed to low adaptation pressure, it is remarkable that Dutch representatives still gathered together and exchanged their implementation experiences concerning mapping and defining (among other things) 'significant flood risk' in EU venues. The studied cases show that information exchange, interaction and debates for the FD cases were primarily driven by idealism. The Dutch wanted to share their long tradition of FRM with other states and, in return, to learn from other actors' interpretations and best practices. This was also driven by a sense of urgency to improve FRM practices across the EU. Implementing agents are dedicated simply to the cause of water management. This means that these reloading activities were driven by the emphasis that policymaking and implementation are a form of collective questioning on society's behalf and that implementation experiences can contribute to this solution. Hence, Hypothesis 2 has been falsified.

Our analysis also made clear that the Water Framework Directive, despite being a framework construct (Josefsson, 2015) and despite its iterative and experimentalist character (Sabel and Zeitlin, 2012) leads to considerably less policy discretion and a higher level of adaptation pressure than the Floods Directive. Based on this, we argue that interactionist and iterative governance, as such, does not lead to high policy discretion and less adaptation pressure as long as implementation agents are bound to procedures and processes of calibration, monitoring and discussion in an EU context.

CONCLUDING REMARKS

This study focused on reloading processes of implementation experiences in the domain of EU water governance.

Our analysis has revealed that agents can have multiple reasons for such reloading, ranging from favouring domestic interests (i.e. lowering implementation costs, overcoming implementation problems, and ensuring a better policy fit) to the idealism of social learning (i.e. establishing better water management practices or improving environmental conditions across the EU). Looking back at our central question, we conclude that policy discretion and adaptation pressure affect an implementing agent's experiences and, subsequently, indeed affect its incentives for being active in reloading implementation experiences across multiple levels of governance. However, when an agent has no self-related incentive to reload, reloading activities still might take place due to more idealistic reasons.

Building on our explorative study, several important topics for future research can be discerned. The first relates to the role of other policy characteristics in processes of reloading, such as the nature of the policy domain (water management, agriculture, nature conservation, etc) and the addressees of the measures to be taken. In the cases studied, addressees were primarily state governance agents; however, what if they were farmers or business organisations? These actors could also reload their experiences and mobilise their lobbies at the EU level. A second topic relates to the role of the characteristics of the policy domain under scrutiny. In comparison with other EU environmental domains, water governance has often been referred to as a relatively open policy field. This is due to, for instance, its extensive public access for information and the multiple (CIS) venues and channels through which new actors can engage (Moss, 2004; Princen, 2010; Richardson, 1994; Wiering et al., 2009). It would also be interesting to study reloading processes in other policy domains, such as the more politicised Common Agricultural Policy and the more specific air quality legislation. Furthermore, it is important to realise that other variables affect reloading processes as well, such as the domestic and EU institutional structure and the ability and capacity of implementing agents involved. And finally, it would obviously be helpful to broaden the testing of our hypotheses to more, if not all, member states. We think that our study constitutes a good start in systematically investigating the processes of reloading that take place after uploading and downloading of EU policies.

ACKNOWLEDGEMENTS

We thank Alison Morley for the English language corrections.

REFERENCES

- Andersen, M.A. and Liefferink, D. (Eds). 1997. *European environmental policy: The pioneers*. Manchester: Manchester University Press.
- Behagel, J. 2012. *The politics of democratic governance: The implementation of the Water Framework Directive*. PhD thesis, Wageningen University.
- Borja, A. and Elliot, M. 2007. What does 'good ecological potential' mean, within the European Water Framework Directive. *Journal of Environmental Planning and Management* 56: doi: 10.1016/j.marpolbul.2007.09.002.
- Bourblanc, M.; Crabbé, A.; Liefferink, D. and Wiering, M.A. 2013. The marathon of the hare and the tortoise: Implementing the EU Water Framework Directive. *Journal of Environmental Planning and Management* 56(10): 1140-1467.
- Börzel, T.A. 2002. Pace-setting, foot-dragging, and fence-sitting: Member state responses to Europeanization. *Journal of Common Market Studies* 40(2): 193-214.
- Börzel, T.A. 2005. Mind the gap! European integration between level and scope. *Journal of European Public Policy* 12(7): 217-236.
- Börzel, T.A. and Risse, T. 2000. When Europe hits home: Europeanization and domestic change. *European Integration* 4(15), <http://eiop.or.at/eiop/texte/2000-015a.htm>
- Breeman, G. and Zwaan, P. 2009. Domestic change and EU compliance in the Netherlands: Policy feedback during enforcement. *European Integration* 31(3): 349-367.

- Carr, J. and Crosnier, G. 2005. Progress report for the strategic coordination group of 26-27 October 2005. European Commission, Brussels.
- CIS. 2009. Common Implementation Strategy for the Water Framework Directive: Guidance document No. 22 updated guidance on implementing the Geographical Information System (GIS) elements of the EU water policy. European Commission, Brussels.
- Dieperink, C.; Raadgever, G.T.; Driessen, P.; Smit, A.A.H. and van Rijswijk, H.F.M.W. 2012. Ecological ambitions and complications in the regional implementation of the Water Framework Directive in the Netherlands. *Water Policy* 14(1): 160-173.
- Dimitrova, A. and Steunenbergh, B. 2013. Living in parallel universes? Implementing European movable cultural heritage policy in Bulgaria. *Journal of Common Market Studies* 51(2): 246-263.
- Dörrenbächer, N. and Mastenbroek, E. 2017. Passing the buck? Analyzing the delegation of discretion after transposition of European Union Law. *Regulation and Governance* 13(1): 70-85.
- Duina, F. 1997. Explaining legal implementation in the European Union. *International Journal of the Sociology of Law* 25(2): 155-179.
- Dunlop, C.A. and Radaelli, C.M. 2013. Systematising policy learning: From monolith to dimensions. *Political Studies* 31(3): 559-619.
- Dworak, T. and Görlach, B. 2005. Flood risk management in Europe: The development of a common EU policy. *International Journal of River Basin Management* 3(2): 97-103.
- European Commission. 2007. Commission Staff working document: Accompanying document to the communication from the Commission to the European Parliament and the Council 'towards sustainable water management in the European Union- first stage in the implementation of the Water Framework Directive 2000/60/EC'.
- European Commission. 2015. Commission staff working document, report on the progress in the implementation of the WFD programmes of measures. Accompanying the document: communication from the Commission to the European Parliament and the Council. The WFD and the FD: actions towards the good status of EU water bodies. COM (2015) 120, Brussels.
- European Commission. 2016. Better Regulation. http://ec.europa.eu/info/law/law-makingprocess/better-regulation-why-and-how_en (assessed 16 December 2016)
- Evers, M. 2012. Participation in flood risk management: an introduction and recommendations for implementation. Report 2012: 1 Centrum för klimat och säkerhet. www.diva-portal.org/smash/get/diva2:442763/fulltext01.pdf
- Evers, M. and Nyberg, L. 2013. Coherence and inconsistency of European instruments for integrated river basin management. *International Journal of River Basin Management* 11(2): 139-152.
- Franchino, F. (Ed). 2007. *The powers of the union: Delegation in the EU*. CUP, Cambridge.
- Green, O.O.; Garmestani, A.S.; van Rijswijk, H.M.F.W. and Keessen, A. 2013. EU water governance: Striking the right balance between regulatory flexibility and enforcement? *Ecology and Society* 18(2): 10. Doi: 10.5751/ES-05357-180210.
- Griffiths, M. 2002. The European water framework directive: An approach to integrated river basin management: *European Water Management Online*. www.ewa-online.eu/tl_files/_media/content/documents_pdf/publications/e-water/documents/85_2002_05.pdf
- Hering, D.; Borja, A.; Carstensen, J.; Carvalho, L.; Elliott, M.; Feld, C.K.; Heiskanen, A.; Johnson, R.K.; Moe, J.; Pont, D.; Solheim, A.L. and van de Bund, W. 2010. The European water framework directive at the age of 10: A critical review of the achievements with recommendations for the future. *Science of the total environment* 408: 4007-4019.
- Héritier, A. 1996. The accommodation of diversity in European policy-making and its outcomes: Regulatory policy as a patchwork. *Journal of European Public Policy* 3(2): 149-167.
- Héritier, A.; Kerwer, D.; Knill, C.; Lehmkuhl, D.; Teutsch, M. and Douillet, A.C. 2001. *Differential Europe-new opportunities and restrictions for policy making in Member States*. Boulder, CO: Rowman and Littlefield.
- Herman, C. 2010. Will the Floods Directive keep our feet dry? Policies and regulations in the Flemish Region and Scotland. *Journal of Water Law* 21(4): 156-166.

- Howarth, W. 2007. The European Community approach to flood defence. *Journal of Water Law* 18(4): 115-116.
- Jordan, A.; Wurzel, R.; Zito, A.R. and Brückner, L. 2003. *Public Administration* 81(3): 555-574.
- Josefsson, H. 2015. Ecological status as a legal construct – Determining its legal and ecological meaning. *Journal of Environmental Law* 27: 231-258.
- Kaika, M. and Page, B. 2003. The EU Water Framework Directive: Part 1. European policy-making and the changing topography of lobbying. *European Environment* 13(6): 314-327.
- Kallis, G. and Butler, D. 2001. The EU Water Framework Directive: Measures and implications. *Water Policy* 3(2): 125-142.
- Keessen, A.M. and van Rijswijk, H.F.M.W. 2012. Adaptation to climate change in European water law and policy. *Utrecht Law Review* 8(3): 39-50.
- Kingdon, J.W. (Ed). 2014. *Agendas, alternatives and public policies*. Second edition, Pearson Education Ltd, Harlow.
- Knill, C. and Lenschow, A. 1998. Coping with Europe: The impact of British and German administrations on the implementation of EU environmental policy. *Journal of European Public Policy* 5(4): 595-614.
- Knill, C. and Lenschow, A. (Eds). 2000. *Implementing EU environmental policy: New directions and old problems*. Manchester: Manchester University Press.
- Knill, C. and Liefferink, D. 2007. Environmental politics in the European Union: Policy-making, implementation and patterns of multi-level governance. *Manchester: Manchester University Press*.
- Liefferink, D.; Wiering, M. and Uitenboogaart, Y. 2011. The EU Water Framework Directive: A multi-dimensional analysis of implementation and domestic impact. *Land Use Policy* 28(4): 712-722.
- Liefferink, D. and Andersen, M.S. 1998. Strategies of the 'green' member states in EU environmental policy-making. *Journal of European Public Policy* 5(2): 254-270.
- Ligtvoet, W.; Beugelink, G.; Brink C.; Franken R. and Kragt F. 2008. *Kwaliteit voor Later: Ex ante evaluatie Kaderrichtlijn Water*. Planbureau voor de Leefomgeving, Bilthoven.
- Mastenbroek, E. 2005. EU compliance: Still a 'black hole'? *Journal of European Public Policy* 12(6): 1103-1120.
- Mastenbroek, E. and Kaeding, M. 2006. Europeanization beyond the goodness of fit: Domestic politics in the forefront. *Comparative European Politics* 4(4): 331-354.
- Molle, F. 2008. Nirvana concepts, narratives and policy models: Insights from the water sector. *Water Alternatives* 1(1): 131-156.
- Moss, T. 2004. The governance of land use in river basins: Prospects for overcoming problems of institutional interplay with the EU Water Framework Directive. *Land Use Policy* 21(1): 85-94.
- Moss, T. and Newig, J. 2010. Multilevel water governance and problems of scale: Setting the stage for a broader debate. *Environmental Management* 46(1): 1-6.
- Mostert, E. 2006. Integrated water resource management in the Netherlands: How concepts function. *Journal of Contemporary Water Resources Education* 135(1): 19-27.
- Mostert, E. and Junier, S.J. 2009. The European flood risk directive: Challenges for research. *Hydrological Earth System Science Discussions* 6: 4961-4988. www.hydrol-earth-syst-sci-discuss.net/6/4961/2009/
- Newig, J.; Challies, E.; Jager, N. and Kochskämper, E. 2014. What role for public participation in implementing the EU Floods Directive? A comparison with the Water Framework Directive, early evidence from Germany and a research agenda. *Environmental Policy and Governance* 24(4): 275-288.
- Nones, M. 2015. Implementation of the Floods Directive in selected EU member states. *Water and Environment Journal* 29: 412-418.
- Page, B. and Kaika, M. 2003. The EU Water Framework Directive: Part 2. Policy innovation and the shifting choreography of governance. *European Environment* 13(6): 328-343.
- Palmer, J.R. 2015. How do policy entrepreneurs influence policy change? Framing and boundary work in EU transport biofuels policy. *Environmental Politics* 24: 270-287.
- Pierson, P. 1993. When effect becomes cause: Policy feedback and political change. *World Politics* 45(4): 595-628.
- Pollack, M.A. 1997. Delegation, agency, and agenda setting in the European Community. *International Organization* 51(1): 99-134.

- Pressman, J.L. and Wildavsky, A.B. (Eds). 1984. *Implementation: How great expectations in Washington are dashed in Oakland: or, why it's amazing that federal programs work at all*. Third edition. Berkely, CA: University of California Press.
- Priest, S.J.; Suykens, C.; van Rijswijk, H.F.M.W.; Schellenberger, T.; Goytia, S.; Kundzewicz, Z.W.; van Doorn-Hoekveld, W.J.; Beyers, J.C. and Homewood, S. 2016. The European Union approach to flood risk management and improving societal resilience: Lessons from the implementation of the Floods Directive in six European countries. *Ecology and Society* 21(4): 50.
- Princen, S. 2010. Venue shifts and policy change in EU fisheries policy. *Marine Policy* 34(1): 36-41.
- Richardson, J. 1994. EU water policy: Uncertain agendas, shifting networks and complex coalitions. *Environmental Politics* 3(4): 139-167.
- Sabel, C.F. and Zeitlin, J. 2012. Experimentalist governance. *The Oxford handbook of governance*. Doi: 10.1093/oxfordhb/9780199560530.013.0012
- Santbergen, L.L.P.A. 2013. Ambiguous ambitions in the Meuse theatre: The impact of the Water Framework Directive on collective-choice rules for integrated River basin management. PhD dissertation, Eburon, Delft.
- Steunenberg, B. and Toshkov, D. 2009. Comparing transposition in the 27 member states of the EU: The impact of discretion and legal fit. *Journal of European Public Policy* 16(7): 951-970.
- STOWA. 2016. Implementatie Richtlijn Overstromingsrisico's (ROR). Deltafact. http://deltaproof.stowa.nl/pdf/Richtlijn_Overstromingsrisico_S_ROR_?rld=24
- Suykens, C. 2015. EU water quantity management in international river basin districts: Crystal clear? *European Energy and Environmental Law Review* 24(6): 134-143.
- Thomson, R. 2007. Time to comply: National responses to six EU labour market directives revisited. *West European Politics* 30(5): 987-1008.
- Thomson, R. 2009. Same effects in different worlds: The transposition of EU Directives. *Journal of European Public Policy* 16(1): 1-18.
- Thomson, R. and Torenvlied, R. 2011. Information, commitment and consensus: A comparison of three perspectives on delegation in the European Union. *British Journal of Political Science* 41(1): 139-159.
- Treib, O. 2014. Implementing and complying with EU governance outputs. *Living Reviews in European Governance* 9(1): 5-47.
- Uitenboogaart, Y.J.; van Kempen, J.J.H.; van Rijswijk, H.F.M.W. and Wiering, M.A. 2009. Chapter 3: the implementation of the WFD in the Netherlands: The Meuse River Basin District and the Dommel Catchment. In Uitenboogaart Y.J.; van Kempen J.J.H.; Wiering M.A.; van Rijswijk H.F.M.W. (Eds), *Dealing with complexity and policy discretion: A comparison of the implementation process of the European Water Framework Directive in five member states*, pp. 56-83. Den Haag: SDU Uitgevers.
- van der Arend, S.; Santbergen, L.; Wiering, M.A. and Behagel, J. (Eds). 2011. *Tien jaar ervaring met de Europese Kader Richtlijn Water: Ambities and ambivalenties*. Delft: Eburon.
- van Eerd, M.C.J.; Dieperink, C. and Wiering, M.A. 2015. 'A dive into floods': Exploring the Dutch implementation of the Floods Directive. *Water Policy* 17(2): 187-207.
- van Eerd, M.C.J.; Wiering, M.A. and Dieperink, C. 2017. Solidarity in transboundary flood risk management: A view from the Dutch North Rhine-Westphalian catchment area. *Climate Policy* 17(3): 261-279.
- van Eerd, M.C.J.; Dieperink, C. and Wiering, M.A. 2018. Opening the black box of implementation feedback: An analysis of reloading strategies in EU water governance. *Environmental Policy and Governance* 0(0). Doi: 10.1002/eet.1803
- van Rijswijk, H.F.M.W.; Gillissen, H.K. and van Kempen, K. 2010. The need for international and regional transboundary cooperation in European river basin management as a result of new approaches in EC water law. *ERA forum* 11(1): 129-157.
- Versluis, E.; van Keulen, M. and Stephenson, P. (Eds). 2011. *Analyzing the European policy process*. Basingstoke: Palgrave Macmillan.
- Warner, J.R. 2006. More stakeholder participation? Multi-stakeholder platforms for integrated catchment management. *International Journal of Water Resources Development* 22(1): 15-35.

- Wiering, M.A.; van Rijswijk, H.F.M.W. and Leroy, P. 2009. Chapter 1: Introduction. In Uitenboogaart Y.; van Kempen J.J.H.; Wiering M.A.; van Rijswijk H.F.M.W. (Eds), *Dealing with complexity and policy discretion: A comparison of the implementation process of the European Water Framework Directive in five member states*, pp. 11-36. Den Haag: SDU Uitgevers.
- Young, A.R. 2010. The European policy process in comparative perspective. In Wallace, H.; Pollack, M.A. and Alasdair, R. (Eds), *Policy-making in the European Union*, pp. 45-68. 6th edition. Oxford: Oxford University Press.
- Zeitlin, J. 2016. EU experimentalist governance in times of crisis. *West European Politics* 39(5): 1073-1094.
- Zhelyazkova, A. 2013. Complying with EU directives' requirements: The link between EU decision making and the correct transposition of EU provisions. *Journal of European Public Policy* 20(5): 705-721.
- Zhelyazkova, A. and Torenvlied, R. 2009. The time-dependent effect of conflict in the Council on delays in the transposition of EU directives. *European Union Politics* 10(1): 35-62.

APPENDIX 1: LIST OF INTERVIEWEES

No.	Date and location	Function and/or organisation
1	4 October 2013, phone	Policy official (FD), Public Works Department
2	7 October 2013, The Hague	Former Head of Water Management, Dutch Ministry of Infrastructure and Environment
3	17 October 2013, phone	Policy official (FD) in North Rhine Westphalia
4	18 October 2013, phone	Policy official, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
5	18 October 2013, phone	Policy official, Public Works Department
6	6 February 2015, skype	Consultant, Fresh Thoughts Consulting
7	24 February 2015, skype	Policy official, Irish Office of Public Works and Flood Relief (risk management division), Former co-chair of the EU working group on floods
8	27 February 2015, Utrecht	Policy official (WFD), Dutch Ministry of Infrastructure and Environment
9	2 March 2015, Breda	Policy official, Dutch Water Authority, Brabantse Delta
10	6 March 2015, phone	Policy official (FD), Public Works Department
11	19 March 2015, The Hague	Policy official (FD), Dutch Ministry of Infrastructure and Environment
12	2 March 2015, phone	Staff member, European Commission (FD)
13	15 October 2015, The Hague	Policy official (FD), Dutch Ministry of Infrastructure and Environment
14	28 January 2016, skype	Consultant, Fresh Thoughts Consulting
15	4 February 2016, Brussels	Staff member, European Commission (FD and WFD)
16	12 February 2016, Utrecht	Policy official (WFD), Dutch Ministry of Infrastructure and Environment
17	16 February 2016, Utrecht	Policy official (FD and WFD), Public Works Department
18	17 February 2016, phone	Consultant supporting the implementation of the Floods Directive in the Netherlands
19	24 February 2016, The Hague	Representative, Dutch Union of Regional Water Authorities
20	25 February 2016, phone	Policy official (FD), Dutch Ministry of Infrastructure and Environment
21	9 March 2016, Zwolle	Consultant, involved with WFD implementation at regional level in the Netherlands
22	10 March 2016, phone	Policy official (WFD), Public Works Department
23	23 March 2016, phone	Policy official, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
24	7 April 2016, phone	Policy official (FD and WFD), Public Works Department
25	8 April 2016, The Hague	Representative, Bureau Brussels
26	19 April 2016, phone	Policy official, Scottish Environment Protection Agency
27	25 April 2016, skype	Official of EurEau
28	28 April 2016, phone	Policy official, Federal ministry for Agriculture, Forestry, Environment and Water Management in Austria

29	13 May 2016, phone	Policy official, House of the Dutch Provinces
30	13 May 2016, phone	Staff member, European Commission (FD)
31	01 May 2016, phone	Austrian policy official, co-chair of the EU Working Group on Floods
32	11 August 2016, phone	Policy official, Dutch Ministry of Infrastructure and Environment
33	16 August 2016, 's Graveland	Official of Natuurmonumenten (NGO)
34	24 August 2016, Paris	Policy official, French Ministry for Ecology, Sustainable Development and Energy
35	25 August 2016, phone	Official, Wassernetz NRW (NGO)
36	30 August 2016, phone	Policy official, Federal Environment Agency, Germany
37	1 September 2016, phone	Member of the European Anglers Alliance and Angling Trust, UK
38	9 September 2016, Lync	Policy official, Swedish Agency for Marine and Water Management
39	12 September 2016, skype	Official, European Environmental Bureau
40	29 September 2016, skype	Official of World Association for Waterborne Transport Infrastructure (PIANC)
41	30 September 2016, phone	Staff member, European Commission (FD and WFD)
42	04 October 2016, phone	Policy official (WFD), Dutch Ministry of Infrastructure and Environment
43	5 October 2016, phone	Policy official (WFD and FD), Public Works Department
44	11 October 2016, phone	Policy official, Le Service Public de Wallonie
45	12 October 2016, phone	Policy official, Public Works Department
46	14&17 October 2016, skype	Member of WssTP and Water Alliance
47	19 October 2016, phone	Policy official, Flemish Environment Agency
48	19 October 2016, phone	Official of Nature and Biodiversity Conservation Union (NABU)
49	28 November 2016, skype	Consultant on (EU) water governance. Former staff member of the European Commission (WFD and FD)
50	13 December 2016, Voorburg	Former policy official at the Dutch Ministry of Infrastructure and Environment
51	14 December 2016, phone	Austrian policy official, co-chair of the EU Working Group on Floods
52	16 December 2016, Utrecht	Policy official (WFD and FD), Public Works Department
53	02 February 2017, phone	Policy official (FD) at Dutch Ministry of Infrastructure and Environment
54	13 July 2017, phone	Staff member, European Commission

THIS ARTICLE IS DISTRIBUTED UNDER THE TERMS OF THE CREATIVE COMMONS *Attribution-NonCommercial-ShareAlike* LICENSE WHICH PERMITS ANY NON COMMERCIAL USE, DISTRIBUTION, AND REPRODUCTION IN ANY MEDIUM, PROVIDED THE ORIGINAL AUTHOR(S) AND SOURCE ARE CREDITED. SEE [HTTPS://CREATIVECOMMONS.ORG/LICENSES/BY-NC-SA/3.0/FR/DEED.EN](https://creativecommons.org/licenses/by-nc-sa/3.0/fr/deed.en)

